

**REMARKS**

Claims 1-8 are present in this application. Claim 1 is independent.

Dependent claim 8 has been amended to place it in better form by referring to a method step of claim 1.

The Advisory Action of August 18, 2006 had indicated that a Proposed Amendment filed August 2, 2006 would not be entered because an amendment to claim 8 would require further consideration and search.

The present Amendment replaces the Proposed Amendment filed August 2, 2006 and takes into consideration the comments made in the Advisory Action of August 18, 2006. In particular, claim 1 has been amended to explicitly recite that complete contents of files are recorded within the area defined as the directory. Applicant requests reconsideration of the outstanding rejections.

**Claim Rejection under 35 USC 102(e) - Igarashi**

Claims 1-5 and 8 have been rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent 6,122,646 (Igarashi). Applicant traverses this rejection.

Claim 1 recites "pre-defining an area on the disk medium as a directory." The claim, as amended, also recites a step of "recording complete contents of files and directories within the area defined as the directory."

The Advisory Action dated August 18, 2006 indicates that the directory record shown in Fig. 8 of Igarashi teaches the claimed pre-defined "area" because it includes "data of files" and a plurality of directories. For the Examiner's convenience, Fig. 8 of Igarashi is reproduced below.

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6,122,646

**DIRECTORY RECORD**

<p><b>(FOR DIRECTORY)</b></p> <p><b>Name</b></p> <p><b>Index to DRB</b></p> <p><b>ID</b></p> <p><b>Size</b></p> <p><b>Date</b></p>
<p><b>(FOR FILE)</b></p> <p><b>Extent record of File Data</b></p> <p><b>Index to ER (Index to ERB, Offset of ER)</b></p> <p><b>(Extent Start Location)</b></p> <p><b>Number of Blocks</b></p> <p><b>ID</b></p> <p><b>Size</b></p> <p><b>Date</b></p>

**FIG.8**

Applicant had intended “recording files and directories within the area” as recording of files themselves, i.e. the contents of the files. The Advisory Action appears to indicate that any data related to a file would constitute a file. Thus, claim 1 has been amended to clarify the

intended meaning of "recording files." Applicant submits that a directory record as shown in Fig. 8 of Igarashi does not teach "recording complete contents of files" within the pre-defined area, e.g. directory record of Fig. 8.

For at least this reason, Applicant requests that the rejection be reconsidered and withdrawn.

As had previously been mentioned, during a telephone interview held June 6, 2006, the Examiner had requested that the claimed "area" and "area location information" be defined. As disclosed in the present specification, the present invention includes a capability of ensuring an area on a disk as a directory and specify areas for recording files and directories belonging to the directory within the area ensured by the directory (specification at page 11, lines 6-9). In particular, hierarchical layers of directories are organized by defining directories in an "area-ensuring mode." Similar to conventional disk management programs, management information for the present invention is stored in a basic volume descriptor (Fig. 8), a space bitmap (Fig. 3), a directory descriptor (Figs. 9A, 9B), and a file descriptor (Fig. 10). As a modification to a conventional directory descriptor, a directory descriptor of the present invention includes a designation for the "area-ensuring mode." An area ensuring mode set to "1" designates a mode in which an area on a disk is ensured as the defined directory (specification at page 13, lines 19-21). As disclosed in the specification, the directory descriptor of the present invention may include information about the location of a continuous area on the disk (a beginning logical block number and the number of logical blocks; specification at page 14, lines 16-19). Alternatively, the directory descriptor may refer to a discrete area (specification at page 15, lines 8-10). In a preferred embodiment, the area-ensuring mode is continuous (Fig. 9B) and the directory

descriptor designates an, "area location information." Fig. 9B of the present application is reproduced below.

FIG.9B

Directory Descriptor		
Byte Location	Bytes	Item Name
0	256	Directory Name
256	4	Generation Date
260	2	Continuous-Area ensuring mode
262	8	Continuous-Area Location Information (Starting LBN and the Number of Logical Blocks)
270	4	The Number of Descriptors (=NOE)
274	4*NOE	Location Information (Starting LBN and the Number of Logical Blocks)

Thus, as disclosed in the present specification, "area" refers to either a discrete area or a continuous area on the disk identified by "area location information" in the directory descriptor that is ensured as the defined directory (specification at page 15, lines 2-3).

The method of claim 1 covers steps in Figs. 11 and 12 for the case of continuous-area ensuring mode. At the time of generating a directory, steps in Fig. 11 are followed including a step S15 of update management information of the directory descriptor to record a continuous area (specification at page 22, lines 7-9). At a subsequent time of creation of a file, steps in Fig. 12 are followed including a step S25 of recording data into the area defined as the directory.

The Office Action indicates that the "second area" of Igarashi constitutes the claimed "area" pre-defined as a directory (Final Office Action at page 3, line 5). Fig. 4 of Igarashi shows a "second area" as being the "Volume Management Area," and Fig. 5 shows details of the "Volume Management Area." It can be seen that files are recorded in the "Extent Area" separate from the "Volume Management Area." Applicant submits that the "Volume Management Area" does not constitute the claimed "area" pre-defined as a directory where files and directories will

be recorded. Furthermore, Applicant submits that Igarashi does not disclose that allocation units in the "Extent Area" are pre-defined as a directory.

Thus, Applicant submits that Igarashi fails to teach each and every element of claim 1. The same argument applies as well to the dependent claims. Applicant requests that the rejection be reconsidered and withdrawn.

**Claim Rejection under 35 USC 103(a) - Igarashi, Walker**

Claims 6 and 7 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Igarashi in view of U.S. Patent 6,134,586 (Walker). Applicant traverses this rejection.

For at least the reasons above for claim 1, Applicant submits that the rejection fails to establish *prima facie* obviousness for dependent claims 6 and 7.

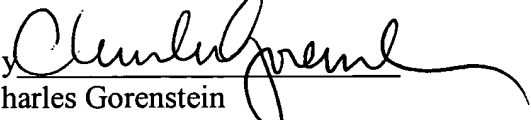
**CONCLUSION**

Should the Examiner have any questions regarding this matter, she is respectfully requested to contact Robert W. Downs (Reg. No. 48,222), who may be reached in the Washington, DC, area at (703) 205-8000.

If necessary, the Commissioner is hereby authorized in this concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

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Respectfully submitted,

By 

Charles Gorenstein

Registration No.: 29,271

BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East

P.O. Box 747

Falls Church, Virginia 22040-0747

(703) 205-8000

Attorney for Applicant